

Letter to the Editor

Update on Long-Term Symptomless HIV Type 1 Infection in Recipients of Blood Products from a Single Donor

Editor: In 1992, we reported on HIV-1 infection in six recipients of blood products from a single donor. We now report the tracing of another recipient from the single common donor. This recipient (C-124), a 77-year-old female, transfused for cardiac surgery with a unit of red cells donated in April 1981 by the common donor, has been traced and tested anti-HIV positive. She is symptomless, with a conserved CD4⁺ count over 13 years since transfusion, and this is the longest infected of the recipients.

The original group¹ of five symptomless recipients has been infected an average of 11 years, and it has now been established that the donor has been infected since April 1981. They all remain clinically symptomless with conserved CD4⁺ counts and none has received antiviral therapy.

Certain HLA antigens have been shown to influence both susceptibility² and disease progression^{3,4} in individuals exposed to HIV. Tissue typing of the Sydney BTS cohort clearly demonstrates that sharing of HLA antigens is not a common factor in this group (Table 1). Shared HLA types also do not appear to

explain long-term survival in one study of long-term infected, sexually acquired HIV.⁵

The identification of yet another symptomless recipient from a single common donor, 13 years since infection, the continued symptomless status of the donor and the recipients, and the varied HLA tissue types of the group, would suggest that sharing of HLA alleles or haplotypes does not explain long-term nonprogression in this cohort.

REFERENCES

1. Learmont J, Tindall B, Evans L, Cunningham A, Cunningham P, Wells J, Penny R, Kaldor J, and Cooper DA: Long-term symptomless HIV-1 infection in recipients of blood products from a single donor. *Lancet* 1992;340:863-867.
2. Plummer FA, Fowke K, Nagelkerke NJD, Simonsen JN, Bwayo J, Nagugi E, *et al.*: Evidence of resistance to HIV among continuously exposed prostitutes in Nairobi, Kenya. In: IXth International Conference on AIDS, 1993. Abstract WS-A07-3.
3. Donald JA, Rudman K, Cooper DW, Baumgart KW, Garais RJ, Gatensby PA, and Rickard KA: Progression of HIV-related disease is associated with HLA DQ and DR alleles defined by restriction fragment length polymorphism. *Tissue Antigens* 1992;39:241-248.
4. Ilican S, Mathur-Wagh U, Skourou ML, Brancato LJ, Marmor M, Zelenuch-Jacquette A, and Winchester R: HLA-B35 is associated with accelerated progression to AIDS. *J Acquir Immune Defic Syndr* 1991;5:37-45.
5. Connor RI and Ho DD: Transmission and pathogenesis of human immunodeficiency virus type 1. *AIDS Res Hum Retroviruses* 1994;10:321-323.

Jennifer Learmont
Lynne Cook
Heather Duckley
John S. Sullivan

NSW Red Cross Blood Transfusion Service
133 Clarence Street
Sydney NSW 2000, Australia

TABLE HLA TYPING OF SYMPTOMLESS GROUP

Code		HLA type		
Current	Previous ^a	A	B	DR
D-36	Donor	1, 23	8, 18	NT
C-124		NT	NT	7, 11
C-98	C	2, 28	7, 60	NT
C-83	F	1, 24	27, 62	2, 4 ^b
C-64	B	3, 32	7, 44	1, 15
C-18	A	2, 14	41, 60	4, -
C-49	E	2, 11	7, 60	15, 13 ^c
C-54	D	25, 32	18, 35	8, 15

^aReference 1.

^bDeceased.

^cTyped by Tay RPLP.